

Application No.: 10/530,530 MAT-8679US
Amendment Dated: December 6, 2007
Reply to Office Action of: September 6, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A vehicle remote control apparatus comprising:
 - a first transmitter for with a first function of outputting an authentication request signal to a mobile device, the mobile device including a radio terminal assigned with an identification code special to a vehicle and outputting an authentication response signal corresponding to the identification code;
 - a second transmitter for with a second function of outputting an interference wave canceling the authentication request signal at the same time as the first transmitter transmits the authentication request signal;
 - a receiver for receiving the authentication response signal output from the mobile device in response to the authentication request signal, thereby checking authenticity of the authentication response signal; and
 - a controller for controlling operation of an on-vehicle equipment unit based on a result of authentication of the authentication response signal; and

wherein the first transmitter and the second transmitter exchange the first function and the second function when the receiver does not receive an authentication response signal for a predetermined period of time.
2. (Original) The vehicle remote control apparatus according to claim 1, wherein the interference wave sets limits to a communicatable range between the first transmitter and the mobile device.
3. (Cancelled)
4. (Original) The vehicle remote control apparatus according to claim 1,

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wherein the on-vehicle equipment unit is a door of the vehicle and the controller controls a lock of the door.

5. (Original) The vehicle remote control apparatus according to claim 4, wherein the controller releases the lock of the door when the authentication of the authentication response signal is validated.

6. (Original) The vehicle remote control apparatus according to claim 1, wherein the interference wave is a burst wave.

7. (Currently Amended) A vehicle remote control system comprising:
a mobile device including a radio terminal assigned with an identification code special to a vehicle and outputting an authentication response signal corresponding to the identification code; and

a vehicle remote control apparatus having:

a first transmitter ~~for outputting with a first function of outputting~~ an authentication request signal to the mobile device;

a second transmitter ~~for outputting with a second function of outputting~~ an interference wave canceling the authentication request signal at the same time as the first transmitter transmits the authentication request signal;

a receiver for receiving the authentication response signal output from the mobile device in response to the authentication request signal, thereby checking authenticity of the authentication response signal; and

a controller for controlling operation of an on-vehicle equipment based on a result of authentication of the authentication response signal; and

wherein the first transmitter and the second transmitter exchange the first function and the second function when the receiver does not receive an authentication response signal for a predetermined period of time.